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# NOTICE OF ALLOWANCE AND FEE(S) DUE

7590

03/09/2004

James Y. Go BLAKELY, SOKOLOFF, TAYLOR & ZAFMAN LLP Seventh Floor 12400 Wilshire Boulevard Los Angeles, CA 90025-1026

**EXAMINER** SOUW, BERNARD E ART UNIT PAPER NUMBER

2881

DATE MAILED: 03/09/2004

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/603,410	06/24/2003	Ansheng Liu	42P17103	4176

TITLE OF INVENTION: METHOD AND APPARATUS FOR PHASE SHIFTING AN OPTICAL BEAM IN AN OPTICAL DEVICE WITH A BUFFER PLUG

APPLN. TYPE	SMALL ENTITY	ISSUE FEE	PUBLICATION FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1330	\$300	\$1630	06/09/2004

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE REFLECTS A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE APPLIED IN THIS APPLICATION. THE PTOL-85B (OR AN EQUIVALENT) MUST BE RETURNED WITHIN THIS PERIOD EVEN IF NO FEE IS DUE OR THE APPLICATION WILL BE REGARDED AS ABANDONED.

#### HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status is changed, pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above and notify the United States Patent and Trademark Office of the change in status, or

If the SMALL ENTITY is shown as NO:

- A. Pay TOTAL FEE(S) DUE shown above, or
- B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check the box below and enclose the PUBLICATION FEE and 1/2 the ISSUE FEE shown above.
- Applicant claims SMALL ENTITY status. See 37 CFR 1.27.
- II. PART B FEE(S) TRANSMITTAL should be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). Even if the fee(s) have already been paid, Part B - Fee(s) Transmittal should be completed and returned. If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted.
- III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

#### PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: Mail

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	E ADDRESS (Note: Legibly mark-up	with any corrections or use B	lock 1)	Fee(s) Transmittal. T	of mailing can only be used f his certificate cannot be used nal paper, such as an assignm	for any other accompanying
James Y. Go	90 03/09/2004			have its own certifica	ite of mailing or transmission.	
	LOFF, TAYLOR & Z	AFMAN LLP		I hereby certify that States Postal Service addressed to the M	ertificate of Malling or Tran this Fee(s) Transmittal is bein with sufficient postage for fir ail Stop ISSUE FEE address PTO, on the date indicated be	g deposited with the Uniter st class mail in an envelop above, or being facsimile
Los Angeles, CA 9	0025-1026					(Depositor's name)
						(Signature)
						(Date)
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nonprovisional	NO	\$1330		\$300	\$1630	06/09/2004
EXAM	INER	ART UNIT	C	LASS-SUBCLASS	٦	
SOUW, BE	RNARD E	2881		385-003000	_	
Address form PTO/SB/12  "Fee Address" indication PTO/SB/47; Rev 03-02 on Number is required.  3. ASSIGNEE NAME AND PLEASE NOTE: Unless	on (or "Fee Address" Indicate or more recent) attached. Use RESIDENCE DATA TO B an assignee is identified beld to the USPTO or is being s	orrespondence fill ag fill ag at of a Customer w  E PRINTED ON THE I ow, no assignee data wubmitted under separate	gents OR, altern rm (having as a gent) and the na ttorneys or agen ill be printed.  PATENT (print of vill appear on the e cover. Comple	natent Inclusion of	e of a single I attorney or 2 stered patent ed, no name 3 assignee data is only appropri DT a substitute for filing an ass	ate when an assignment ha
Please check the appropriate	assignee category or categor	ries (will not be printed	on the patent);	🗅 individual 🕒	corporation or other private g	roup entity 🔘 governmen
4a. The following fee(s) are	enclosed:	•	ment of Fee(s):			
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Director for Patents is reques	sted to apply the Issue Fee ar	•	osit Account Nu ny) or to re-apply		issue fee to the application ide	
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other than the applicant; a interest as shown by the rec	Publication Fee (if require a registered attorney or age cords of the United States Pa	nt; or the assignee or tent and Trademark Off	other party in fice.			
This collection of informat obtain or retain a benefit tapplication. Confidentiality estimated to take 12 minut completed application for case. Any comments on suggestions for reducing the Patent and Trademark C 22313-1450. DO NOT SI SEND TO: Commissioner of the confidence of the c	tion is required by 37 CFR by the public which is to firis governed by 35 U.S.C. I les to complete, including gan to the USPTO. Time will the amount of time you rais burden, should be sent to ffice, U.S. Department of END FEES OR COMPLE for Patents, Alexandria, Virgon and the public which is required to the property of the property of the property of the public which is required by the property of the public which is required by the public which is the publi	1.311. The information is a few days and 37 CFR 1.14. To thering, preparing, and I vary depending upon equire to complete the othe Chief Information of Commerce, Alexar TED FORMS TO TH inia 22313-1450.	n is required to to process) an his collection is I submitting the the individual is form and/or on Officer, U.S. ndria, Virginia IS ADDRESS.			

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7590 03/09/2004			EXAMINER		
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12400 Wilshire Boulevard Los Angeles, CA 90025-1026			2881		
			DATE MAILED: 03/09/2004		

## Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 0 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 0 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) system (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (703) 305-1383. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at (703) 305-8283.

14/

	Application No.	Applicant(s)				
	10/603,410	LIU, ANSHENG				
Notice of Allowability	Examiner	Art Unit				
	Bernard E Souw	2881				
The MAILING DATE of this communication appe All claims being allowable, PROSECUTION ON THE MERITS IS herewith (or previously mailed), a Notice of Allowance (PTOL-85) NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RI of the Office or upon petition by the applicant. See 37 CFR 1.313	(OR REMAINS) CLOSED in this app or other appropriate communication GHTS. This application is subject to	plication. If not included will be mailed in due course. <b>THIS</b>				
1. This communication is responsive to <u>06/24/2003</u> .						
2. The allowed claim(s) is/are <u>1-30</u> .						
3. $\boxtimes$ The drawings filed on <u>24 June 2003</u> are accepted by the E	xaminer.					
<ul> <li>4. Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</li> <li>a) All b) Some* c) None of the:</li> <li>1. Certified copies of the priority documents have been received.</li> <li>2. Certified copies of the priority documents have been received in Application No.</li> <li>3. Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* Certified copies not received:</li> </ul>						
Applicant has THREE MONTHS FROM THE "MAILING DATE" noted below. Failure to timely comply will result in ABANDONM THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.		complying with the requirements				
5. A SUBSTITUTE OATH OR DECLARATION must be subm INFORMAL PATENT APPLICATION (PTO-152) which give						
6. CORRECTED DRAWINGS ( as "replacement sheets") must (a) including changes required by the Notice of Draftspers 1) hereto or 2) to Paper No./Mail Date  (b) including changes required by the attached Examiner's Paper No./Mail Date  Identifying indicia such as the application number (see 37 CFR 1 each sheet. Replacement sheet(s) should be labeled as such in the state of the sheet.	on's Patent Drawing Review (PTO- s Amendment / Comment or in the C	Office action of ngs in the front (not the back) of				
7. DEPOSIT OF and/or INFORMATION about the depo- attached Examiner's comment regarding REQUIREMENT	sit of BIOLOGICAL MATERIAL r FOR THE DEPOSIT OF BIOLOGIC	must be submitted. Note the AL MATERIAL.				
<ul> <li>Attachment(s)</li> <li>1. ☑ Notice of References Cited (PTO-892)</li> <li>2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)</li> <li>3. ☑ Information Disclosure Statements (PTO-1449 or PTO/SB/O Paper No./Mail Date 06/24/2003</li> <li>4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material</li> </ul>	6. ☐ Interview Summary Paper No./Mail Da 98), 7. ☐ Examiner's Amendr	te				

Art Unit: 2881

#### **DETAILED ACTION**

#### Information Disclosure Statement

1. The information disclosure statement (IDS) filed on 06/24/2003 along with the application did not include 5 (five) non-patent documents that have been received with the application. However, the non-patent documents have been considered by the examiner and they are listed in the PTO-982 attached to this Office Action.

#### **ALLOWANCE**

2. Claims 1-30 are allowed.

### Reasons for Allowance

- 3. The following is an examiner's statement of reasons for allowance:
- An optical waveguide phase shifting apparatus comprising a first and second semiconductor regions having opposite conductivity types, an electrical contacts coupled to the first region of the optical waveguide outside the optical path of an optical beam directed along the waveguide, a buffer of insulating material disposed along the first region of the optical waveguide between the electrical contact and the optical path of the optical beam, a buffer plug of insulating material disposed in the optical waveguide on the same side as the electrical contact, wherein the buffer plug helps direct the optical beam away from the contact region, as recited in claim 1, is neither anticipated nor rendered obvious by any prior art.

Art Unit: 2881

Claim 13 is allowed for reciting a method of shifting the phase of an optical beam in an optical waveguide specifically using the apparatus of claim 1.

- Claim 18 is allowed for reciting a system that incorporates the optical phase shifter of claim 1 using the method of claim 13.
- Claim 25 is allowed for reciting an optical beam splitter that makes use of the phase shifter of claim 1.
- Claims 2-12, 14-17, 19-24, and 26-30 are also allowed because of their dependencies, either directly or indirectly, upon claims 1, 13, 18 or 25.
- 4. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

#### **Communications**

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Bernard E Souw whose telephone number is 571 272 2482. The examiner can normally be reached on Monday thru Friday, 9:00 am to 5:00 pm..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John R Lee can be reached on 571 272 2477. The central fax phone Application/Control Number: 10/603,410

Art Unit: 2881

Page 4

number for the organization where this application or proceeding is assigned is (703) 872-9306 for regular communications as well as for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703 308 0956.

bes February 23, 2004

EUPEDIAS AR LEE
EUPEDIAS AR PATENT EXAMINER
TEGROLOGY CENTER 2000